RESEARCH

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THIS WEEK'S RESEARCH QUESTIONS

- **249** How effective are home based cardiac rehabilitation programmes compared with supervised programmes at special centres?
- **250** Do obese adolescents eat less and lose more weight than controls when using a device that shows how much and how quickly they eat?
- 251 Does stopping smoking in early stage lung cancer improve prognosis?
- **252** Is cardiac stress testing before elective non-cardiac surgery associated with improved postoperative survival and hospital stay?
- **253** Does routine screening for postnatal depression in primary care represent value for money for the NHS?

Treatment of childhood obesity by retraining eating behaviour

In this trial by Anna Ford and colleagues (p 250), obese 9-17 year olds were randomly allocated to standard care (advice on exercise and diet) or to advice plus use of a Mandometer, a computerised device that gives real time feedback during meal times. It plots a graph showing the rate at which food disappears from the plate compared with the ideal rate programmed



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in by a food therapist. After a year, children in the Mandometer group had significantly lower average body mass index and body fat scores than those in the standard care group, and were eating less and more slowly. "Mandometer therapy," say the authors, "seems to be a useful addition to the rather sparse options for treating adolescent obesity effectively."

This paper was covered by media worldwide, including *Scientific American, The Hindustan Times*, and *Visit Bulgaria*. The *Washington Post*'s health bloggers asked "Can a computerized nag help fight the obesity epidemic? A new British study indicates it could" (http://voices. washingtonpost.com/checkup/2010/01/computerized_nag_fights_ obesit.html), whereas the *Sydney Morning Herald* commented, perhaps unfairly, "Teenagers are famous for not wanting to do what people tell them, but evidently they are prepared to make an exception for a machine" (http://www.smh.com.au/lifestyle/wellbeing/food-machine-takes-aimat-child-obesity-20100106-lt9a.html).



Home based cardiac rehabilitation

More than two thirds of people in the United Kingdom who survive a heart attack tum down invitations to cardiac rehabilitation classes, which are mostly held in hospitals, gyms, and community leisure centres. They say they're too busy, don't like groups, or can't get to or can't park at hospitals. Rehabilitation at home might be a good

alternative, but does it work? Yes, say Hasnain Dalal and colleagues, whose Cochrane review of 12 studies with nearly 2000 patients (p 249) finds that home and centre based forms of cardiac rehabilitation seem to be equally effective at improving clinical outcomes and health related quality of life. Given that home programmes were also associated with better adherence and no greater cost, patients should be offered this option. Dr Dalal tells us that his team is now trying to develop appropriate rehabilitation programmes for people with heart failure.

Influence of smoking cessation after diagnosis of early stage lung cancer

A Parsons and colleagues' systematic review of 10 cohort studies finds that it's well worth giving up smoking if you have early stage lung cancer (p 251). They estimate that 70% of 65 year olds with this disease who quit smoking will survive five years, compared with 33% of those who continue to smoke. Editorialists Tom and Janet Treasure (p 223) discuss the study's limitations and acknowledge that some doctors "discuss smoking habits with all patients and caution against smoking. Others think it is inhuman to dwell on the matter—that it adds to feelings of guilt and takes away a life long comfort from the dying patient." But they're firmly in favour of supporting patients' attempts to quit at any time of life.

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Myocardial infarction and stroke associated with diuretic based two drug antihypertensive regimens

Current US guidelines recommend low dose diuretics as first line pharmacological treatment for uncomplicated hypertension, but many patients need a second drug as well. Inbal Boger-Megiddo and colleagues urge caution about one such combination, diuretics plus calcium channel blockers, because this regimen is associated with a higher risk of myocardial infarction than the other commonly used two drug combinations (doi:10.1136/bmj.c103).



Use of angiotensin receptor blockers and risk of dementia in a predominantly male population

This paper (*BMJ* 2010;340:b5465), which featured in a recent *BMJ* podcast (http://podcasts.bmj.com/bmj/2010/01/15/disaster-and-dementia/), has prompted much debate (http://www.bmj.com/cgi/eletters/340/jan12_1/b5465). Benjamin Wolozin, the lead author, has responded to most of the criticisms and adds, "We really wanted to compare all of the ARBs [angiotensin receptor blockers], but unfortunately not all the ARBs are on the VA [Veterans Affairs health system] formulary, so we could not look at other ARBs such as telmisartan, olmesartan, and eprosartan. However, we are currently working on a follow-up study using information from the California databases (with very promising results)."

What has academic primary care research done for us?

Chris del Mar's provocative editorial on the value of primary care research (*BM*/2009;339:b4810) continues to cause ripples. Domhnall MacAuley, primary care editor, blogs about reactions among members of the *BM*/s primary care advisory group (http://blogs.bmj.com/bmj/2010/01/11/domhnall-macauley-achievements-of-academic-primary-care-in-the-last-decade/).